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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,105	11/03/2003	Steven V. Byrne	DP-310054	5148
22851	7590	01/04/2005	EXAMINER	
DELPHI TECHNOLOGIES, INC.			VY, HUNG T	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			2821	

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/700,105

Applicant(s)

BYRNE ET AL.

Examiner

Hung T Vy

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The specification has been checked to the extent necessary to determine the presence of possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 U.S.C. § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 11 and 14-16 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Du et al., U.S. patent No. 6,809,686 in view of Fuhrmann et al., U.S. Pub. 2002/0057792.

Claims 1, and 14, Du et al., disclose a fastening structure for an antenna module assembly, comprising: a cover 10, a gasket inner seal (See column 3, line 5-6), a circuit board 80 including at least one antenna element 60, 20, and a base 120, wherein: the gasket inner seal is placed over the circuit board, wherein the gasket inner seal and circuit board are intermediately located between the cover 10 and the base 120 (see

column 2, line 63-68 and column 3, line 1-5), but Du et al. is silent as to whether the base includes a plurality of beveled snap-tabs and the beveled snap-tabs receiving portions engage an inner perimeter of the cover defined by flexible snap-tabs. However, Fuhrmann et al. disclose the base includes a plurality of beveled snap-tabs 12 (see fig. 1) and the beveled snap-tabs 12¹ receiving portions engage an inner perimeter of the cover 14 (See fig. 3-4). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Du et al. to have a plurality of beveled snap-tabs as taught by Fuhrmann et al. The motivation for doing so would have been to provide a plurality of beveled snap-tabs to fasten and matingly secure the cover to the base in order to decreasing assembly labor, component cost and quality problems.

Claim 2, Du et al. disclose the base retains the circuit board 80 about a base shoulder such that the base shoulder adjacently opposes a grounding strip located about the perimeter of the circuit board for electrical coupling (See fig. 1A and 3A).

Claims 3-6, Du et al. disclose the cover includes outboard ribs and inboard ribs that are located about a frond end perimeter, a rear end perimeter and side perimeter, and a corner perimeter of the antenna module assembly (See fig. 4).

Claim 11, Du et al. disclose the cover 10 includes a polycarbonate blend (See column 3, line 1).

Claims 15-16, Du et al. disclose the base includes a plated, casted metallic (See column 2, line 65).

4. Claims 7-10 and 12-13 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Du et al., U.S. patent No. 6,809,686 and Fuhrmann et al., U.S. Pub. 2002/0057792 in view of Scott et al., U.S. Patent No. 6,331,838.

Claims 7-10, and 12-13, Du et al. and Fuhrmann et al. disclose all limitation of invention except for a mast antenna element. However, Scott et al. disclose a mast antenna element (104)(See fig. 7). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Du et al. al. and Fuhrmann et al. to have mast antenna element as taught by Scott et a. The motivation for doing so would have been to provide a mast antenna element in order to have the desire signal as GPS.

Citation of Pertinent References

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Wilz, er. et al. disclose Automatically-activated Hand-Supportable Laser Scanning Bar Code Symbol Reading System with Data Transmission Activation Switch, U.S. Patent No. 6,283,375 (See fig. 32).

Conclusion

5. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/700,105
Art Unit: 2821

Page 6

Hung T. Vy
Art Unit 2828
December 23, 2004

A handwritten signature in black ink, appearing to read 'Hoang Nguyen', with a long horizontal stroke extending to the right.

HOANG NGUYEN